

TED NELSON'S SHORT LIST OF DESIRABLE SOFTWARE COMPANIES

that Autodesk should consider acquiring.

A. "Multimedia" companies.

1. Avid Technologies, Massachusetts.

This firm is foremost among the many companies making computer-based video and film editing systems-- and, eventually, I believe they will extend into multimedia and hypermedia.

Avid has seized the high ground as the #1 system in Hollywood. In my opinion no one else even comes close. The technical guys think it's a much easier problem than it is. A good editing system must be designed by someone who understands

the technicalities of film,
the technicalities of video,

object-oriented programming,
interface design;

as well as

the *craft* of movie-making,
the *art* of movie-making.

Avid has a proven product that is successful in all these realms and in my opinion will use its successful base as starting territory for its conquest of other media areas.

2. Sens8. Sausalito. Makes virtual reality tools.

Eric Gullichsen, who left Autodesk after some political infighting, set up his own VR company and has left us in the dust. While our VR product is said to be more general and powerful, Eric has seized the high ground with lots of orders and a serious market position. While many dislike his character, this is not the issue. If we really want to be serious in this arena, I think we need this guy, his market share and his fire in the belly.

3. A Major Rendering Firm: either Alias, Wavefront or SoftImage.

We all know that image synthesis and 3D animation will be vastly important in the future, in every human endeavor. Autodesk's 3D Studio has seized the low ground on the PC. However, we do not have a connection to a company offering top-of-the-line Hollywood-type software, and I think this is a necessary complement.

4. XAOS. San Francisco. Extraordinary software for liquid, smoky, powdery movie effects.

These people are competing with Lucasfilm, Pixar and Pacific Data Images in their high-end effects rendering software-- but bringing it down to products for the PC, Mac and Indigo. They are definitely comers, and they're looking for capital. Would love to show us around.

5. The Voyager Company.

Publishes interactive titles.

My feeling is that these people are the only publishers of hypermedia titles who understand what it's about. Their music titles by Bob Winter are remarkable. Bob Stein, its head, is a nice guy, very bright, said to be difficult, would probably not sell but might let us invest.

6. One-man company competing with MacroMind Director (Name I've mislaid).

This guy has a small, clean-looking product that makes little responding programs that compete with the big, clunky Macromind Director on the Mac, for hypermedia and "interactive multimedia."

7. Owl, International, Inc. Seattle and Edinburgh, Scotland. Makes **GUIDE**.

There are a lot of hypertext companies out there making junk. These people had one of the first products to market and still one of the best-- allowing connections not just

between little screenfuls (like Hypercard) but between very large scrolling documents. (The fact that I recommend them shows greatness of heart, since their chief designer has publicly insulted me.)

B. Language and science companies.

8. Mathematica.

Created by world-class physicist Steven Wolfram, Mathematica is the most general and powerful tool for mathematical calculations in all areas. Like AutoCAD, it is big and unequalled. It can also serve as an engine for fast calculations by other software.

9. Digitalk. Makes Smalltalk-V.

Within the highest-level programming community, the Smalltalk language has unique status: the original Object-Oriented programming language, from which the Macintosh, and Windows, and most of today's software arose. There are two vendors of Smalltalk: Parc Place (selling it very expensively) and Digitalk (making good products for the Mac and PC which are COMPATIBLE). They have an excellent product and a big customer base, and they are working closely with our subsidiary AMIX in electronic distribution of code, consulting and so on (talk to folks at Amix about this).

10. Gold Hill Computers (?).

Cambridge, Mass. Makes **GOLDEN COMMON LISP**.

In the world of programming languages, Lisp enjoys a very special position, and Golden Common Lisp is one of the most powerful learning environments in the computer world-- a superb interactive graphical environment for running and modifying Lisp programs, even while they are running. Runs on PCs.

11. Spyglass. Champaign, Illinois.

This company closely associated with the supercomputer world makes visualization tools for the Macintosh that turn complicated files of scientific data into color and three-dimensional diagrams-- the kind of beautiful stuff you see in the *Scientific American*. These tools will be more and more important in the future. Could work very well with Mathematica.

C. In a Category of His Own.

12. The Bootstrap Foundation.

Douglas Engelbart, one of the greatest men of our time, the inventor of word processing, the mouse, windows on a computer screen and groupware, is still not getting the support he needs. He wants to unite the corporations of America in a study of what is needed for the future. This

will almost surely tie in with our Xanadu and Amix. A small investment in helping this great man with his pursuits, even if they don't seem perfectly aligned with ours, could have great payoff for us.